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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/853,722
Filing Date: May 14, 2001
Appellant(s): KLOS ET AL.

Bruce H. Bernstein
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 17, 2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

A. Whether claims 1-7, 18-19 and 22-23 are properly rejected under 35 U.S.C. 103(a) as unpatentable over Sundaresan et al. (U.S. Patent No. 6,463,079) in view of Rawson et al. (U.S. Patent No. 6,028,867).

B. Whether claims 8-17, 20-21 and 24-38 are properly rejected under 35 U.S.C. 103(a) as unpatentable over Sundaresan et al. (U.S. Patent No. 6,463,079) in view of Rawson et al. (U.S. Patent No. 6,028,867) in further view of Byers (U.S. Patent No. 5,926,472).

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-38 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6463079	SUNDARESAN et al	10-2002
6028867	RAWSON et al	2-2000
5926472	BYERS	7-1999

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 1-7, 18-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundaresan et al. (US 6,463,079) in view of Rawson et al. (US 6,028,867).

For claim 1, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

receiving a service order (figure 9, reference step 940) at a provisioning server (figure 10A, reference 1030), the service order requesting implementation of the DSL service, and comprising provisioning data (figure 11, reference steps 1110-1130) (col. 15 lines 55-65 and col. 16 lines 27-34); and

assigning a plurality of facilities (figure 1, references 170-A and 170-B) to implement the service order based on the provisioning data (col. 5 lines 21-30), the plurality of facilities (references 170-A and 170-B) comprising at least a remote terminal

connectable to a terminal of the DSL subscriber (col. 15 line 66 to col. 16 line 5 and col. 16 lines 57-67).

However, Sundaresan et al. do not disclose determining an interface corresponding to each of the plurality of assigned facilities, each interface converting at least a portion of the provisioning data into a specific protocol corresponding to the assigned facility. In an analogous art, Rawson et al disclose determining an interface (figure 1, references 130-A and 130-B) corresponding to each of the plurality of assigned facilities (figure 1, references 160-A and 160B), each interface converting at least a portion of the provisioning data into a specific protocol corresponding to the assigned facility (col. 11 lines 17-22).

Sundaresan et al. in view of Rawson et al disclose configuring each of the plurality of facilities (figure 1, references 170-A and 170B), using the corresponding interface, to implement the service order based on the provision data (col. 18 lines 32-62).

One skilled in the art would have recognized an interface corresponding to each of the plurality of assigned facilities to use the teachings of Rawson et al in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the interface corresponding to each of the plurality of assigned facilities as taught by Rawson et al in Sundaresan et al.'s system with the motivation being provided high speed access to any location connected to a central office in a cost effective manner (col. 4 lines 37-39).

For claim 2, Sundaresan et al. disclose determining at least one path interconnecting the plurality of facilities and a subscriber port of the remote terminal, the subscriber port being configured to connect with the DSL subscriber terminal (figure 19, col. 29 lines 3-19).

For claim 3, Sundaresan et al. disclose determining and implementing a cross-connection in at least one of the plurality of facilities to enable the at least one path interconnecting the plurality of facilities and the subscriber port (figure 19, col. 29 lines 3-19).

For claim 4, Sundaresan et al. disclose storing configuration data in a system database, the configuration data comprising data identifying the plurality of facilities assigned to implement the service order, the at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal, and the cross-connection in the at least one of the plurality of facilities (figure 19, col. 29 lines 3-19).

For claim 5, Sundaresan et al. disclose wherein the provisioning data is derived based on the provisioning data indication in the service order (col. 2 lines 35-47).

For claim 6, Sundaresan et al. disclose wherein the service order indicates the provisioning data by at least one of providing the provisioning data and providing a profile identification that corresponds to parameters that define the DSL service (figure 9, col. 15 lines 55-65).

For claim 7, Sundaresan et al. disclose determining whether the service order comprises erroneous data; and when the service order is determined to comprise

erroneous data, displaying at a graphical user interface an error message, which identifies the erroneous data, and receiving input from the graphical user interface to correct the erroneous data (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 18, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

a server (figure 10A, reference 1030) that receives a service order (figure 9, reference step 940) for implementing the DSL service (col. 15 lines 55-65 and col. 16 lines 27-34);

a plurality of network facilities (figure 1, references 170-A and 170-B) connectable to the server (col. 5 lines 21-30); and

a system database that stores the service order (figure 7A, col. 20 lines 34-35); and wherein the server assigns provisioning facilities from among the plurality of network facilities needed to implement the service order (col. 5 lines 21-30), the provisioning facilities comprising at least one remote terminal, connectable to a terminal of a subscriber of the DSL service (col. 15 line 66 to col. 16 line 5 and col. 16 lines 57-67).

However, Sundaresan et al. do not disclose a plurality of interfaces identifiers for interfaces corresponding to the plurality of network facilities. In an analogous art, Rawson et al disclose a plurality of interfaces identifiers (figure 1, references 130-A and 130-B) for interfaces corresponding to the plurality of network facilities (figure 1, references 160-A and 160-B). Sundaresan et al. in view of Rawson et al disclose

wherein the server directs configuration of each of the provisioning facilities, using at least one of the interface identifiers retrieved from the system database corresponding to each of the provisioning facilities (col. 10 lines 18-21), enabling communication with the provisioning facilities, to implement the DSL service based on the service order (col. 18 lines 32-62).

One skilled in the art would have recognized an interface corresponding to each of the plurality of assigned facilities to use the teachings of Rawson et al in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the interface corresponding to each of the plurality of assigned facilities as taught by Rawson et al in Sundaresan et al.'s system with the motivation being provided high speed access to any location connected to a central office in a cost effective manner (col. 4 lines 37-39).

For claim 19, Sundaresan et al. disclose the remote terminal comprising a subscriber port, the subscriber port being configured to connect with a DSL subscriber terminal, wherein the server enables at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal (figure 19, col. 29 lines 3-19).

For claim 22, Sundaresan et al. disclose a graphical user interface connected to the server and configured to interface with the server, the system database and at least one of the plurality of network elements (figure 5, col. 8 lines 5-26).

For claim 23, Sundaresan et al. disclose when the service order comprises erroneous data, the graphical user interface displays an error message, which identifies

the erroneous data, and receives input from an operator in response to the erroneous data (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

B. Claims 8-17, 20-21 and 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundaresan et al. (US 6,463,079) in view of Rawson et al. (US 6,028,867) further in view of Byers (US 5,926,472).

For claims 8, 12-14, 20 and 27-29, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

receiving a service order (figure 9, reference step 940) at a common server (figure 10A, reference 1030), requesting set up of the DSL service (col. 15 lines 55-65 and col. 16 lines 27-34);

converting the service order into provisionable steps (col. 16 lines 27-67 and col. 18 lines 1-24);

determining facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps (col. 5 lines 21-30), the facility assignment data comprising identification of at least a remote terminal and a subscriber port, connectable to a terminal of the DSL subscriber (figure 19, col. 29 lines 3-19); and

configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface (col. 18 lines 32-62).

Sundaresan et al. do not disclose determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities. In an analogous art, Rawson et al disclose determining an

interface (figure 1, references 130-A and 130-B) for each of the plurality of facilities (figure 1, references 160-A and 160-B), each interface enabling communication with the corresponding one of the plurality of facilities (col. 11 lines 17-22). Sundaresan et al. in view of Rawson et al disclose configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities (figure 1, references 170-A and 170-B) using the corresponding interface (col. 18 lines 32-62).

One skilled in the art would have recognized determining an interface for each of the plurality of facilities to use the teachings of Rawson et al in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the determining interface for each of the plurality of facilities as taught by Rawson et al in Sundaresan et al.'s system with the motivation being provided high speed access to any location connected to a central office in a cost effective manner (col. 4 lines 37-39).

However, Sundaresan et al. in view of Rawson et al do not disclose an optical concentrator device connectable to the remote terminal. In an analogous art, Byers discloses an optical concentrator device connectable to the remote terminal (col. 1 lines 43-45). Sundaresan et al. in view of Rawson et al and Byers further disclose the configuring each of the plurality of facilities to implement the service order comprising one of building, deleting or changing at least one virtual path over an optical fiber connection between the remote terminal and the optical concentrator device (col. 29 lines 54-60 as set forth in claims 12 and 27); providing a network side port at the remote

terminal configured to connect with the subscriber port; communicating to the optical concentrator device the identity of the network-side port; and configuring the optical concentrator device to support the virtual path to the network-side port of the remote terminal (figure 19, col. 28 line 66 to col. 29 line 39 as set forth in claims 13-14 and 28-29); wherein the at least one of the remote terminal and the optical concentrator device determine and implement a cross-connection to enable the at least one path interconnecting the plurality of facilities and the subscriber port (figure 19, col. 28 line 66 to col. 29 line 39 as set forth in claim 20).

One skilled in the art would have recognized an optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 4852).

For claim 9, Sundaresan et al. disclose formatting data from the service order into a common internal format prior to converting the service order into provisional steps (col. 18 lines 49-53).

For claim 10, Sundaresan et al. disclose validating an intent of the service order with respect to a state of a port of the remote terminal associated with the DSL

subscriber and provisioning the service order in the remote terminal upon successful validation (figure 19, col. 28 line 66 to col. 29 line 46).

For claim 11, Sundaresan et al. disclose identifying errors related to at least one of the service order and the provisioning of the DSL service; and displaying information regarding the errors at a graphical user interface, the graphical user interface being configured to enable a user to analyze and respond to the errors (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 15, Sundaresan et al. disclose the configuring each of the plurality of facilities to implement the service order comprising one of building, deleting or changing at least one cross-connection in at least one of the plurality of facilities (col. 20 lines 34-35).

For claim 16, Sundaresan et al. disclose enqueuing the provisionable steps after determining the facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps; and sequentially dequeuing the provisionable steps for implementation on a scheduled provisioning date, prior to determining the interface for each of the plurality of facilities (col. 20 lines 26-49). .

For claim 17, Sundaresan et al. disclose receiving service profile data related to at least one service from a service provider, the service profile data comprising at least one parameter related to the service order; storing the service profile data in a system database; and configuring each of the plurality of facilities to implement the service order additionally based on the service profile data (col. 19 lines 14-51 and col. 20 lines 26-35).

For claim 21, Sundaresan et al. disclose the system database comprising configuration data that identifies the plurality of facilities assigned to implement the service order, the at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal, and the cross-connection in the at least one of the plurality of facilities (col. 20 lines 34-35).

For claims 24 and 30, Sundaresan et al, disclose processing orders for high bandwidth connections comprising:

a service order entry system that receives a service order for the DSL service from a DSL service provider (figure 9, reference step 940) (col. 5 lines 46-65, col. 15 lines 55-65 and col. 16 lines 27-34);

a server (figure 10A, reference 1030) that receives the service order from the service order entry system (col. 16 lines 27-34);

a plurality of network facilities (figure 1, references 170-A and 170-B) connectable to the server (figure 10A, reference 1030) and a terminal of a subscriber of the DSL service (figure 1, references 110-A and 110-B) (col. 29 lines 3-19);

a facility inventory system connected to the server (figure 10A, reference 1030) that stores facility information regarding each of a plurality of network facilities, the facility information comprising a type, a location and an availability of each of the plurality of network facilities (figure 7A, col. 9 lines 45-60); and

a system database connected to a server (figure 10A, reference 1030) that stores data relating to the service (figure 7A, col. 9 lines 45-60 and col. 20 lines 34-35); and

wherein the server (figure I OA, reference 1030) communicates with the facility inventory system to determine provisioning facilities from among the plurality of network facilities needed to implement the DSL service based on order (col. 19 lines 9-46 and col. 20 lines 26-35), the provisioning facilities comprising at leas one remote terminal having a subscriber port (figure 19, col. 29 lines 3-19).

Sundaresan et al. do not disclose a plurality of interfaces corresponding to the plurality of network facilities, the plurality of interfaces enabling communication with the plurality of network facilities. In an analogous art, Rawson et al disclose a plurality of interfaces (figure 1, references 130-A and 130-B) corresponding to the plurality of network facilities (figure 1, references 160-A and 160-B), the plurality of interfaces (references 130-A and 130-B) enabling communication with the plurality of network facilities (references 160-A and 160-B) (col. 11 lines 17-22).

Sundaresan et al. in view of Rawson et al disclose wherein the server (figure 10A, reference 1030) directs configuration of each of the provisioning facilities (figure 1, references 160-A and 160-B) using a corresponding one of the plurality of interfaces (figure 1, references 130-A and 130-B) retrieved from the system database to implement the DSL service (col. 10 lines 18-21).

One skilled in the art would have recognized determining an interface for each of the plurality of facilities to use the teachings of Rawson et al in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the determining interface for each of the plurality of facilities as taught by Rawson et al in Sundaresan et al.'s system with the motivation

being provided high speed access to any location connected to a central office in a cost effective manner (col. 4 lines 37-39).

However, Sundaresan et al. in view of Rawson et al do not disclose at least one optical concentrator device, the remote terminal being connectable to the optical concentrator device via an optical fiber line. In an analogous art, Byers discloses at least one optical concentrator device, the remote terminal being connectable to the optical concentrator device via an optical fiber line (col. 1 lines 43-45).

One skilled in the art would have recognized an optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 48-52).

For claim 25, Sundaresan et al. disclose a graphical user interface connectable to the server that enables interaction by a network operator with at least one of the server, the plurality of network facilities and the system database (figure 5, col. 8 lines 5-26).

For claim 26, Sundaresan et al. disclose wherein the server identifies errors related to at least one of the service order and the provisioning of the DSL service; and wherein information regarding the errors is displayed at the graphical user interface and

error responses are sent from the graphical user interface to the server (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 31, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

a receiving source code segment that receives a service order requesting the DSL service (figure 9, cot. 15 lines 55-65 and col. 16 lines 27-34);

an assigning source code segment that assigns a plurality of facilities needed to implement the service order based on provisioning data indicated by the service order (col. 5 lines 21-30), the plurality of facilities comprising at least a remote terminal connectable t a terminal of a DSL subscriber (col. 15 line 66 to col. 16 line 5 and col. 16 lines 57-67).

Sundaresan et al. do not disclose a determining source code segment that determines an interface corresponding to each of the plurality of facilities, each interface converting the service order data into a specific protocol corresponding to the assigned facility. In an analogous art, Rawson et al disclose a determining source code segment that determines an interface (figure 1, references 130-A and 130-B) corresponding to each of the plurality of facilities (figure 1, references 160-A and 160-B), each interface converting the service order data into a specific protocol corresponding to the assigned facility (col. 11 lines 1722).

Sundaresan et al. in view of Rawson et al disclose a configuring source code segment that configures each of the plurality of facilities (figure 1, references 170-A and

170-B), using the corresponding interface, to implement the service order based on instructions from a provisioning server (col. 18 lines 32-62).

One skilled in the art would have recognized a determining source code segment that determines an interface corresponding to each of the plurality of facilities to use the teachings of Rawson et al in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the determining source code segment that determines an interface corresponding to each of the plurality of facilities as taught by Rawson et al in Sundaresan et al.'s system with the motivation being provided high speed access to any location connected to a central office in a cost effective manner (col. 4 lines 37-39).

However, Sundaresan et al. in view of Rawson et al do not disclose an optical concentrator device connectable to the remote terminal. In an analogous art, Byers discloses an optical concentrator device connectable to the remote terminal (col. 1 lines 43-45).

One skilled in the art would have recognized an optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 4852).

For claim 32, Sundaresan et al. disclose a path determining source code segment that determines at least one path interconnecting the plurality of facilities and a subscriber port of the remote terminal, the subscriber port being configured to connect with the DSL subscriber terminal (figure 19, col. 29 lines 3-19).

For claim 33, Sundaresan et al. disclose a cross-section determining source code segment that determines and implements a cross-connection in at least one of the plurality of facilities to enable the at least one path interconnecting the plurality of facilities and the subscriber port (figure 19, col. 29 lines 3-19).

For claim 34, Sundaresan et al. disclose a memory source code segment that stores configuration data in a system database, the configuration data comprising data identifying the plurality of facilities assigned to implement the service order, the at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal, and the cross-connection in the at least one of the plurality of facilities (figure 19, col. 29 lines 3-19).

For claim 35, Sundaresan et al. disclose wherein the provisioning data is derived based on the provisioning data indication in the service order (col. 2 lines 35-47).

For claim 36, Sundaresan et al. disclose wherein the service order indicates the provisioning data by at least one of providing the provisioning data and providing a profile identification that corresponds to parameters that define the DSL service (figure 9, col. 15 lines 55-65).

For claim 37, Sundaresan et al. disclose an error detection source code segment that determines whether the service order comprises erroneous data and, when the

service order is determined to comprise erroneous data, initiates display at a graphical user interface of an error message, which identifies the erroneous data, and receives input from the graphical user interface to correct the erroneous data (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 38, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

a receiving source code segment that receives a service order at a common server via a service order entry system, the service order corresponding to a DSL subscriber (figure 9, col. 15 lines 55-65 and col. 16 lines 27-34);

a converting source code segment that converts the service order into provisional steps (cot. 16 lines 27-67 and col. 18 lines 1-24); and

a facility assignment source code segment that determines facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps (cot. 5 lines 2130), the facility assignment data comprising identification of at least a remote terminal and a subscriber port, connectable to a terminal of the DSL subscriber, a an optical concentrator device connectable to the remote terminal (figure 19, col. 29 lines 3-19).

Sundaresan et al. do not disclose an interface determining source code segment that determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities. In an analogous art, Rawson et al disclose an interface determining source code segment that determining an interface (figure 1, references 130-A and 130-B) for each of the plurality

of facilities (figure 1, references 160-A and 160-B), each interface enabling communication with the corresponding one of the plurality of facilities (col. 11 lines 17-22).

Sundaresan et al. in view of Rawson et al disclose a configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities (figure 1, references 170-A and 170-B) using the corresponding interface (col. 18 lines 32-62).

One skilled in the art would have recognized an interface determining source code segment that determining an interface for each of the plurality of facilities to use the teachings of Rawson et al in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the interface determining source code segment that determining interface for each of the plurality of facilities as taught by Rawson et al in Sundaresan et al.'s system with the motivation being provided high speed access to any location connected to a central office in a cost effective manner (cot. 4 lines 37-39).

However, Sundaresan et al. in view of Rawson et al do not disclose an optical concentrator device connectable to the remote terminal. In an analogous art, Byers discloses an optical concentrator device connectable to the remote terminal (col. 1 tines 43-45). One skilled in the art would have recognized an optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the

remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 48-52).

(11) Response to Argument

Response to appellant's argument:

A. Response to appellant's argument on the 35 U.S.C. 103(a) claims 1-7, 18-19 and 22-23, Sundaresan et al. and Rawson et al.:

The References Relied Upon by the Examiner are Non-Analogous

In response to applicant's argument that Rawson et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Rawson et al. provides interfaces using different DSL technologies support high bandwidth data paths and delivering all data received on more than one DSL interfaces to a destination remote target using a shared bandwidth pipe (col. 5 lines 13-17), and can be used by any type of provider to provide high bandwidth remote access (col. 5 lines 28-29). Rawson et al. reference is used as a secondary reference to incorporate the Sundaresan et al.'s processing orders for high bandwidth connections. The Sundaresan et al. reference provides an operational support system (OSS) that processing orders for high bandwidth connections on based on digital subscriber loop

(DSL) technology (Abstract lines 1-3). Therefore, Sundaresan et al. and Rawson et al. references are analogous art.

There is No Motivation to Combine Sundaresan et al. with Rawson et al.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Rawson et al.'s interface is incorporated into Sundaresan et al.'s processing orders for high bandwidth connections with the motivation being to support high bandwidth data paths and delivering all data received on more than one DSL interfaces to a destination remote target using a shared bandwidth pipe (col. 5 lines 13-17).

The Combination of Sundaresan et al. in view of Rawson et al. Does not Teach or Suggest All of the Limitations of the Rejected Claims

Response to appellant's argument: The combination of Sundaresan et al. in view of Rawson et al. does not teach or suggest all of the limitations of the rejected claims.

(1) Claim 1:

The appellant argues with respect to claim 1, that Rawson et al. do not teach or suggest determining an interface corresponding to each facility assigned to provision a DSL service and using the interface to convert provisioning data into a specific protocol

corresponding to each assigned facility. In response, Rawson et al. teach determining an interface (figure 1, reference 130A) corresponding to each facility (figure 1, reference 160-A) assigned to provision a DSL service and using the interface (figure 1, reference 130-A) to convert provisioning data into a specific protocol corresponding to each assigned facility (figure 5, reference 540, col. 11 lines 17-22 and col. 13 lines 33-35).

The appellant argues that any "interface" disclose by Rawson et al. necessarily interfaces between networks, or between a network and an end user, not between a provisioning server and a subscriber. In response, Rawson et al. teach the interface (figure 1, reference 130-A) between user (figure 1, reference 110) and provisioning server (figure 1, reference 170). Furthermore, in figure 13, Sundaresan et al. also suggest the interface between user (figure 1, reference 110) and provisioning server (figure 10A, reference 1030) (figure 13, col. 20 lines 51-57).

(2) Claim 18:

The appellant argues with respect to claim 18, that Rawson et al. do not teach or suggest the interface identifiers corresponding to network facilities. In response, Rawson teach the interface identifiers corresponding to network facilities (figure 1, reference 160-A, col. 6 lines 52-60). The appellant argues the DSLAMs 130-A and 130-B, at best, can only interface between the user 110-A to 110-E and the telecommunication network 170, not between the a provisioning server (not shown in Rawson et al.) and the remote targets 160-A and 160-B. Also, the interfaces do not enable communication with the network facilities (i.e. remote targets 160-A and 160-B)

to implement a DSL service order, they simply enable a network connection for use by the user 110-A to 110-E. The examiner refers the same response in claim 1 above.

Furthermore, the appellant argues that the remote targets 160-A and 160-B are located outside the telecommunication network 170, and therefore are not network facilities as recited in claim 18. In response, Rawson et al. teach at Abstract lines 8-10, "Using shared equipment and transmission facilities, the present invention enables the high-speed remote access connection to be provided in a cost effective manner". Remote targets 160-A and 160-B are connected to network, thus the remote targets 160-A and 160-B are facilities that connected to the network.

(3) Claims 2-7, 19 and 22-23:

Claim 6

Appellant's argues that Sundaresan et al. merely teach entering data specific to a user, such as user location, as opposed to referencing an identifiable profile. In response, Sundaresan et al. clearly teach at col. 15 lines 55-65 (figure 9), "In step 910, a requestor enters into a computer system the information identifying a user location and the desired service". Sundaresan et al. further teach at col. 16 lines 10-18, "The desired services which need to be specified include the type of DSL technology which is to be provide on the corresponding local loop. As is well known in the relevant arts, different DSL technologies provide different speeds." Therefore, Sundaresan et al. teach the recited limitation in claim 6.

Claims 7 and 23

Appellant's argues that Sundaresan et al. do not teach or suggest displaying an error message on a GUI (e.g., the Display Unit 570), or receiving input via the GUI in response to the erroneous data. In response, Sundaresan et al. clearly teach at col. 22 lines 44-50, "The error, if terminal, are acceptable due to the customer satisfaction and the ability to plan the delivery service. Also, the reasons for not providing choices may be communicated to the requestor so that further investigation may be performed on the accuracy of the assumption mad by OSS 190." (displaying an error message on a GUI (e.g., the Display Unit 570 means). Sundaresan et al. further teach at col. 23 line 26 to col. 24 line 55, "Accordingly, in an alternative approach, two input (e.g., address and telephone number) receive from a requestor may be used in pre-qualifying a user location for DSL based service." (receiving input via the GUI in response to the erroneous data means). Therefore, Sundaresan et al. teach the recited limitations in claims 7 and 23.

B. Response to appellant's argument on the 35 U.S.C. 103(a) claims 8-17, 20-21 and 24-38, Sundaresan et al., Rawson et al. and Byers:

The References Relied Upon by the Examiner are Non-Analogous

The appellant argues that the references are non-analogous art. In response, the examiner refers the same response in section A.

There is No Motivation to Combine Sundaresan et al. with Rawson et al.

The appellant argues that there is no motivation to combine Sundaresan et al. with Rawson et al. In response, the examiner refers the same response in section A.

The Combination of Sundaresan et al. in view of Rawson et al. Does not Teach or Suggest All of the Limitations of the Rejected Claims

(1) Claim 8

The appellant argues with respect to claim 8, that Sundaresan et al. in view of Rawson et al. do not disclose or suggest determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities, and configuring each facility to implement the service order based on instructions communicated from a common server to each of the plurality of facilities using the corresponding interface. In response, the examiner refers the same response in section A above.

The appellant argues that Sundaresan et al. do not disclose or suggest converting a service order into provisionable steps. In response, Sundaresan et al. teach at col. 18 lines 1-24, "OSS 190 receives from server system 1030 information identifying the user location, desired services, and the date from which the service desired. OSS 190 the process the received information to determine whether the requested services can be provided." Sundaresan et al. teach converting the service order itself into provisional steps, which are then implemented in the assigned facilities needed to provision the DSL service by securing the local loops (figure 17) and automatic provisioning of PVC (figure 19). Therefore, Sundaresan et al. in view of Rawson et al do teach the recited limitations of claim 8.

(2) Claim 24

The appellant argues with respect to claim 24, that Rawson et al. do not teach or suggest the interfaces corresponding to network facilities of claim 18. In response, the examiner refers the same response in claim 18, section A.

The appellant argues that Sundaresan et al. do not disclose or suggest a facility inventory system, In response, Sundaresan et al. teach at col. 18 lines 1-3, "OSS 190 receives from server system 1030 information identifying the user location, desire services, and the date from which the services are desired." (a facility inventory system means).

(3) Claim 31

The appellant argues with respect to claim 31, that Sundaresan et al. and Rawson et al. do not teach a determining source code segment that determines an interface corresponding to each of the plurality of facilities, each interface converting the service order data into a protocol corresponding to an assigned facility, and configuring source code segment that configures each facility to implement the service order using the corresponding interface. In response, the examiner refers the same response in claim 1, section A.

(4) Claim 38

With respect to claim 38, the appellant's argument is similar to claim 8. In response, the examiner refers the same response in claim 8, section A.

(5) Claim 9-17, 20-21, 24-30 and 32-37

Claims 17, 30 and 36

The appellant argues with respect to claims 17, 30 and 36, that Sundaresan et al. merely teach entering data specific to a user, such as user location, as opposed to referencing an identifiable profile. In response, the examiner refers the same response in claim 6, section A.

Claims 11, 26 and 37

The appellant argues with respect to claims 11, 26 and 37, that Sundaresan et al. do not teach or suggest displaying error or erroneous data at a GUI, or correcting error through input from the GUI. In response, the examiner refers the same response in claims 7 and 23, section A.

Claim 9

The appellant argues with respect to claim 9, that Sundaresan et al. do not teach or suggest formatting the data of a received service order into a common format. In response, Sundaresan et al. clearly teach "When a requestor enters information related to a user location, XML-based software may be implemented, which transfers the data required to OSS 190 immediately upon entry (without the requestor having to send the web page to any server)." Therefore, Sundaresan et al. teach the recited limitation in claim 9.

Conclusion: For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Conferees

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